FINAL ACTION

1.   This action is in response to amendment filed on 12/20/07. Claims 2-20 are

added. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Blackmore et

al. (US 7,089,289), hereinafter Blackmore.

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the

invention "by another," or by an appropriate showing under 37 CFR 1.131.

4.   As to claim 1, Blackmore discloses a method for the transfer of message packets

in a computing environment having a plurality of nodes in communication with one

another via a switched network (105, 205, fig. 1), said method comprising the steps of:

    providing a communication adapter between an autonomous data processing

unit having nodes and said switched network (fig. 1);

    receiving said packets through an interface (110, fig. 2) connected to at least one

of said data processing nodes whose memory is the source of information to be

transferred (col. 14, lines 43-58, "sending a message stored in a memory of a first data

processing system"); and

    processing message packet header information with a programmable instruction

processor capable of recognizing commands and data for transfer of information within

said message packet directly to memory locations within a targeted node (col. 8, lines

21-45, "header handler").

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1, 2, 5-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wilson et al, (US 7,031,904), hereinafter Wilson, in view of Connery

et al, (US 6,246,683), hereinafter Connery.

7.   As to claims 1 and 15, Wilson discloses a method for the transfer of message

packets in a computing environment having a plurality of nodes in communication with

one another via a switched network (fig. 1C), said method comprising the steps of:

providing a communication adapter between an autonomous data processing

unit having nodes and said switched network (fig. 1C; col. 8, lines 11-29; col. 9, lines

34-67);

receiving said packets through an interface (NIC) connected to at least one of

said data processing nodes whose memory is the source of information to be

transferred (col. 2, lines 34-60); and

processing message packet header information with a programmable instruction

processor capable of recognizing commands and data for transfer of information within

said message packet to memory locations within a targeted node (col. 14, lines 34-57,

"SCSI commands and write data"; col. 16, lines 5-32, "SCSI disk drives are capable of

queuing multiple commands").

8.   Although Wilson discloses transferring information to memory locations within a

targeted node without any intervention, Wilson does not use a word "directly". Connery

discloses transferring information *directly* to memory locations within a targeted node

(col. 2, lines 10-39, "move the payload directly into a destination buffer"; col. 5, lines 27-

54). It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to combine the teachings of Wilson and Connery because

Connery's transferring information directly would reduce the number of times that the

information of a communication must be copied by the host system (Connery, col. 2,

lines 10-16).

14.   As to claims 2 and 16, Wilson discloses wherein a plurality of communication

adapters are provided (fig. 1C; col. 8, lines 11-29; col. 9, lines 34-67).

15.   As to claims 5 and 18, Wilson discloses further comprising the step of using a

channel for establishing communication between initiating and terminating nodes (fig.

1C; col. 8, lines 11-29; col. 9, lines 34-67).

16.   As to claim 6, Wilson discloses wherein a plurality of channels are used (fig. 1C;

col. 8, lines 11-29; col. 9, lines 34-67).

17.   As to claim 7, it is rejected for the same reasons set forth in claim 1 above.

18.   As to claim 8, Wilson discloses wherein said mechanism also allows a variety of

hardware tasks to be assigned and performed by each of channels(fig. 1C;

col. 8, lines 11-29; col. 9, lines 34-67).

19.   As to claims 9-14, 19 and 20, Wilson discloses wherein each channel has

associated with it a specific register, wherein said specific register is a channel state

register, wherein said channel register associated with a specific channel can only be

accessed by a task associated with that specific channel, wherein only those tasks that

associated with a specific channel can access said channel state register for that

channel, wherein said channel state register can only be accessed by said task

associated with it (col. 11, lines 30-50; col. 13, line 59 – col. 14, line 16; col. 14, lines

46-57).

20.   Claims 3, 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wilson et al, (US 7,031,904), hereinafter Wilson, in view of Connery et al, (US

6,246,683), hereinafter Connery, further in view of Jadav et al, (US 6,332,197),

hereinafter Jadav.

21.   As to claims 3, 4 and 17, Wilson does not specifically discloses wherein each

adapter is provided with a mechanism for time of day synchronization, wherein each

adapter is provided with at least one mechanism that establish back up adapter unit

such that any remaining adapter unit can take over communications operations of a

failed adapter unit. Jadav discloses wherein each adapter is provided with a mechanism

for time of day synchronization (col. 6, lines 61-67; col. 9, lines 8-63), wherein each

adapter is provided with at least one mechanism that establish back up adapter unit

such that any remaining adapter unit can take over communications operations of a

failed adapter unit (col. 2, lines 11-21; col. 8, lines 47-59; col. 9, lines 8-63). It would

have been obvious to one of ordinary skill in the art at the time of the invention was

made to combine the teachings of Wilson, Connery and Jadav because Jadav's

teachings would immediately available the data in the event of a failure of the adaptors

by maintaining copies of updated data in different adaptors, as taught by Jadav (col. 9,

lines 8-13).

Conclusion

22.   Applicant's arguments with respect to claims 1-20 have been considered but are

moot in view of the new ground(s) of rejection.

23.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 6:30-2:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jungwon Chang/
Primary Examiner, Art Unit 2154
April 14, 2008